

# What Matters?



To most humans, living sustainably on this planet is all that really matters. But for us physicians, it would appear that the definition of the edges around and defining the truly “important things” seem to have become a little blurred.

Maybe by reviewing the societal, cultural and historical perspectives of Medicine we can bring into focus that with which physicians should be occupying their time. Toward that end, let’s review the pertinent existing literature on the topic, and where better to start than:

## **How Writing Changed the World**

*By Heather Whipps, Live Science’s History Columnist*

*Posted: 11 February 2008 08:53 am ET*

*Humans had been speaking for a couple hundred thousand years before they got the inspiration or nerve to mark their ideas down for posterity.*

*But when a Mesopotamian people called the Sumerians finally did scratch out a few bookkeeping symbols on clay tablets 5,000 years ago, they unknowingly started a whole new era in history we call, well ... history.*

*The presence of written sources denotes the technical dividing line between what scholars classify as prehistory versus what they call history, which starts at different times depending on what part of the world you're studying.*

*In most places, writing started about the same time ancient civilizations emerged from hunter-gatherer communities, probably as a way to keep track of the new concept of "property," such as animals, grain supplies or land.*

*By 3000 B.C. in Mesopotamia (present-day Iraq), and then soon after in Egypt, and by 1500 B.C. in China, people were scribbling, sketching and telling their world about their culture in a very permanent way.*

*When memory failed*

*When ancient Mesopotamians started settling down onto farms surrounding the first cities, life became a bit more complicated. Agriculture required expertise and detailed recordkeeping, two elements that led directly to the invention of writing, historians say.*

*The first examples of writing were pictograms used by temple officials to keep track of the inflows and outflows of the city's grain and animal stores which, in the bigger Sumerian urban centers such as Ur, were big enough to make counting by memory unreliable.*

*Officials began using standardized symbols — rather than, say, an actual picture of a goat — to represent commodities, scratched into soft clay tablets with a pointed reed that had been cut into a wedge shape. Archaeologists call this first writing "cuneiform," from the Latin "cuneus," meaning wedge.*

*The system developed quickly to incorporate signs that represented sounds, and soon all of Mesopotamia was taking notes, making to-do lists and (presumably) writing love letters.*

*Egyptian writing — the famous hieroglyphics — developed independently not long thereafter, under similar circumstances, historians think.*

*A few thousand years later, as variations on the two systems spread throughout the region, the entire ancient world had writing schemes that vastly improved the efficiency of economies, the accountability of governments and, maybe most importantly to us, our understanding of the past.*

### **Literacy a privilege**

*Reading and writing in ancient times wasn't for the masses, however. Daily life in Mesopotamia and Egypt was time-consuming, and so writing became a specialized profession, usually for members of the elite class. The highly-regarded scribes of ancient Mesopotamia were even depicted in art wearing cuneiform writing implements (a bit like a set of chopsticks) in their belts as a mark of their importance.*

*Literacy remained a privilege of aristocratic males in most societies all the way until the 19th-century, when public education became more widespread around the world.*

*That means that while the historical period is exponentially better understood than the experiences of humans before writing was invented, written accounts are largely about the experiences of the upper classes, historians say.*

*About one in five people today, concentrated mostly in Third World nations, are illiterate.*

The next step in the process is to define those of us in the medical profession as to our place in the big scheme of things:

### **Societal Perceptions of Physicians: Knights, Knaves, or Pawns?**

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The British economist Julian Le Grand suggested that public policy is grounded in a conception of humans as "knights," "knaves," or "pawns." Human beings are motivated by virtue (knights) or rigid self-interest (knaves) or are passive victims of their circumstances (pawns). A society's view of human motivation influences whether it builds public policies that are permissive, punitive, or prescriptive.

Le Grand's observations were drawn from his studies of British social welfare policy and civil servants but could aptly be applied to physicians and their role in the US health care system. Many health care debates—especially those relating to health care financing, quality, and education—implicitly prescribe a view of physicians and their underlying motivations. Depending on the perspective, physicians are either in practice for the betterment of society or their own selfish gain; or they are automatons whose actions are defined more by external rules and regulations.

In this Commentary, we explore the ways in which physicians are variously represented as knights, knaves, and pawns in public discourse and relate the importance of designing policies that match the true motivations of physicians—whatever they may be.

#### **Physicians as Knights**

If a society conceives of physicians as ever well-intentioned knights, it places stewardship for the health care system firmly in their hands. Physicians can be trusted to use and deploy resources wisely, minimize waste, and look beyond their narrow individual and specialty interests to protect the system as a whole. Individual physician decision making and autonomy are given the highest priority. The physician is the ultimate champion of the patient and policies are structured to support the physician's work. Physicians practice medicine to save and improve lives; any financial gain is secondary. Physicians read medical journals and texts because of their love of learning and a desire to provide the best care to their patients. They perform clinical and basic research to advance science. The role of policy and payment is mainly to get out of physicians' way and let them do their jobs as professionals and to seek and respect their advice when policy affects health of the public.

#### **Physicians as Knaves**

If a society conceives of physicians as knaves" then policy, management, and educational efforts are designed to combat and work against physicians, not with them. Physicians are interested in themselves and their financial well-being first and their patients second, if at all. Physicians must be given rewards and incentives to motivate them to what is right by their patients and any such schemes would have to be carefully monitored for abuse, fraud, and waste. Physicians learn new techniques and procedures and order tests and studies for personal gain. Any participation in scientific research is driven by self-glorification and narcissism. The health care system works in spite of knave physicians, not because of them. Policies and regulation must guard against their malfeasance, and the public must be protected by regulation and report cards.

#### **Physicians as Pawns**

If a society conceives of physicians as pawns, then efforts are applied to building systems to ensure that physicians do what is right for patients because physicians cannot be trusted to do so on their own accord. Left to their own devices, physician behaviors are unpredictable. The pawn physician is merely a function of the environment in which he or she practices; accordingly, physicians must be given guidelines to follow and policy makers and regulators must decide clinical priorities. Physicians may or may not enjoy learning, but they study and maintain knowledge because licensing and board examinations require that they do. If physicians are required to do more laboratory tests, they will; if required to obtain fewer, they will. Place physicians in a particular practice setting and they will adapt to the local culture and

expectations. The role of health policy and regulation for the pawn physician is to guide his or her every behavior because he or she lacks individual agency and judgment to reliably do what is right.

### **Implications**

Le Grand's work on post–World War II British social policy found that perceptions of human motivations gradually transformed, with the prevailing view of the typical British citizen morphing from knight into knave as the costs of maintaining an expensive welfare state increased.

US perspectives on physicians have undergone a similar transformation with the increasing cost (both to taxpayers and to individual patients) of health care delivery. As physician behavior has been tied to these rising costs and increasing scrutiny has been applied to the quality of care delivered, policy discourse often reflects the perspective that physicians are an obstacle not an enabler to a functioning health care system. Rather than being counted on to exercise their professional ethic to address problems in health care delivery, physicians should be guided to do what is right with an increasing menu of incentive payments (ie, pay for performance or value-based purchasing) or strict regulations. Rather than being counted on to maintain their knowledge and expertise on their own accord, they are subject to periodic examinations to demonstrate continued proficiency.

These views are grounded in evidence of unwarranted variation in care, clear evidence of waste and even fraud, and decline in knowledge over time. The modern US physician is regarded as either a knave or a pawn and is seldom regarded as a knight. But the evidence that has led to distrust of physicians does not apply universally and many physicians still are the knights in the health care system. How can society be sure not to undermine those motivated by professionalism while guarding against those motivated by self-interest?

Not all policy prescriptions have abandoned the view of physician as knight. Prepaid models of health care payment such as accountable care organizations and the patient-centered medical home place responsibility in the hands of physicians—with the idea that physicians will be responsible stewards. In these examples, physicians must be counted on to organize and structure care delivery, responsibly use resources, and measure and improve individual and population outcomes. Still, it is perhaps the knavish conception of physicians that makes these physician-driven models of health care delivery more the fodder of pilot projects and demonstrations than models that are rapidly adopted and widely disseminated.

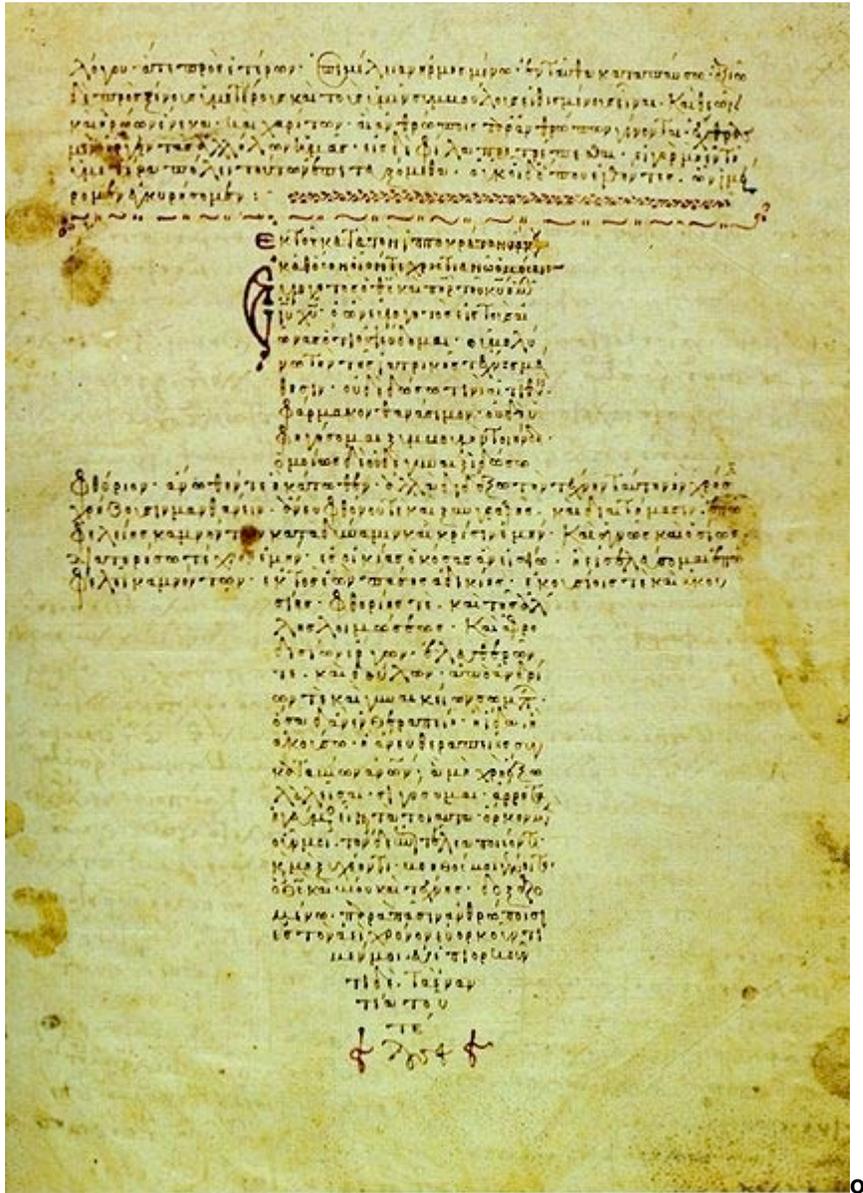
Le Grand offers an important lesson and warning: it is critically important to understand and get "true motivations" right. Disaster may follow if persons largely of a knavish quality are treated as knights; but the same may be true for "policies fashioned on a belief that people are knaves if the consequence is to suppress their natural altruistic impulses and hence destroy part of their motivation to provide a quality public service." Le Grand further warns that policies that "treat people as pawns, may lead to demotivated workers . . . again causing adverse outcomes for the policies concerned; while policies that give too much power . . . may result in individuals making mistakes that damage their own or others' welfare."

The US public would be wise to heed Le Grand's advice and carefully consider whether its perceptions of physicians match reality. For their part, physicians must thoughtfully consider whether and how they contribute to the perception that they are knights, knaves, or pawns.

**To best define what society believes that physicians should be about, we need only to recite the:**

**Hippocratic Oath** is an oath historically taken by doctors swearing to practice medicine ethically. It is widely believed to have been written by Hippocrates, often regarded as the father of western medicine, in Ionic Greek (late 5th century BC), or by one of his students, and is usually included in the Hippocratic Corpus. Classical scholar Ludwig Edelstein proposed that the oath was written by Pythagoreans, a theory that has been questioned due to the lack of evidence for a school of Pythagorean medicine. Although mostly of historic and traditional value, the oath is considered a rite of passage for practitioners of medicine in some countries, although nowadays the modernized version of the text varies among the countries.

The Hippocratic Oath (orkos) is one of the most widely known of Greek medical texts. It requires a new physician to swear upon a number of healing gods that he will uphold a number of professional ethical standards.



### Hippocratic Oath

*I swear to fulfill, to the best of my ability and judgment, this covenant: I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.*

*I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.*

*I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.*

*I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.*

*I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given to me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.*

*I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.*

*I will prevent disease whenever I can, for prevention is preferable to cure.*

*I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.*

*If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.*

**Now, to bring us up to the 21<sup>st</sup> century, and bring our current situation into perspective:**

**Except for Medicare and Medicaid, most of the "mischief" in healthcare over the last century has been comprised more or less of random actions scattered amidst long periods of inattention.**

**Capitalistic based, these actions have been the handy work of individualistic opportunists, pressure groups, and lobbyists.**

**Actions/reactions have been strung together as if they were part of an overall design that has become interpreted as the "American Health Care System".**

**Our dysfunctional profit based model has spawned multi-lateral and mutual suspicion and distrust between the various factions.**

**The current tension is primarily produced by the diametrically opposed "frame of mind" of the emerging "major two sides";**

**1.) Health care system**

**2.) Patients.**

**Our existing flawed conceptual model evolved more or less randomly and in doing so developed a "reality" of its own.**

**Our "new normal" is going to be an inescapably and endlessly complex process, so the sooner we begin the correction of medicine, the better,**

**It is difficult to imagine these two primary groups, given their diverse technocratic and political ideologies, successfully going into a room to negotiate without first realizing that both are going to come out as relative "losers".**

**The honest and only question each group should be asking themselves is who is going to "lose more".**

**The health care system, like the American Political System, is more or less adapted to dealing with crises, and generally incapable of dealing with chronic problems.**

**This innate incompetence and inherent lack of focus/leadership explains why we have been unable to accomplish much and as a result the health care system has meandered into insolvency.**

**The health care system correction is actually in need something similar to a “TARP moment” of crisis, of equal shock and awe as that confronted recently by our equally dysfunctional American economy. Remember how after the Wall Street meltdown, both factions, over a single weekend, went behind closed doors and came up with a plan. But we need to move at the speed of ‘business’ and not at the speed of bureaucracy.**

**Those politicians accomplished the TARP coalition by parking their ideology and partisanship at the door, coupled with the ability to say behind closed doors what they had been unable to say in public.**

**So why can't we as health care providers anticipate this inevitable approaching cataclysm and propose a correction before our health care system becomes irretrievably absconded by the hospital/insurance coalition?**

**In reality, the system didn't get into its current incompetent iteration by complete accident; there have been factions and circumstances responsible for our present predicament:**

- 1.) Medicare in the 60's**
- 2.) Managed care in the 70's and 80's**
- 3.) Hospital/insurance consortiums in the 90's to present turned our health care system into a sick care cartel (a cartel is not a free market enterprise).**

**Paraphrasing Henry Kissinger and applying his thoughts on political revolution to our situation: 'What we have now is a confluence of resentments against the existing “regime” of Health Care. The history of almost every revolution, in fact I know of no exception to this...is that the confluence of resentments has to sort itself out and form groupings, then it has to be seen whether these various groupings can coexist with each other, can form coalitions, form a democratic process, and have an election after which there is no other election.'**

**Paraphrasing Condoleezza Rice with regards to our Middle East politics: 'For the last several decades we have pursued stability at the expense of democracy: we achieved neither. Now we are taking a different course, we are supporting the democratic aspirations of all people.'**

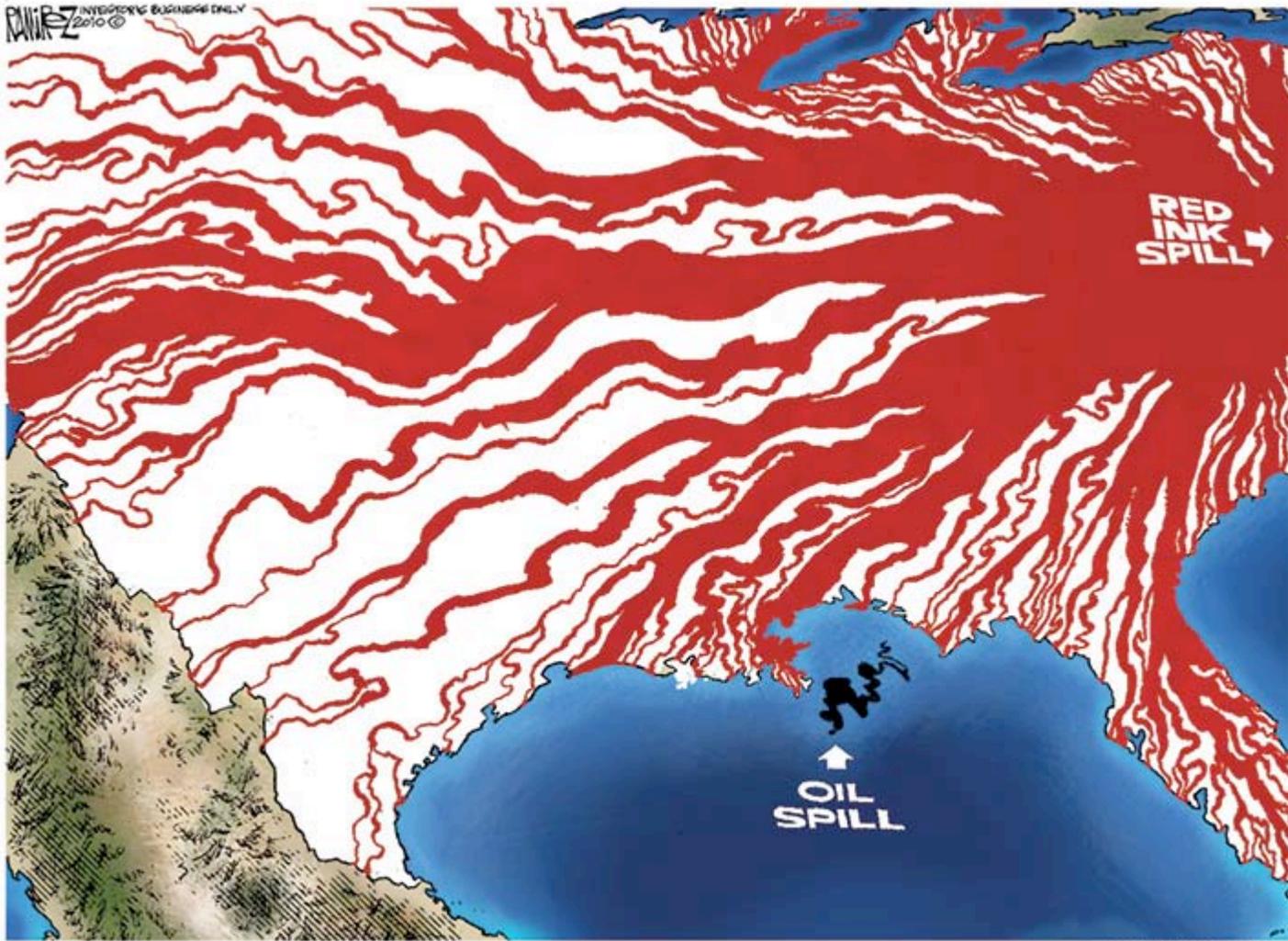
**And while we dwell on our politician's ideology, they have an uncanny ability to downplay our insurmountable health care finances (on their present course) by simply using the monstrous monetary amounts often and nonchalantly so that those sums begin to seem surmountable. Take the concept of “one billion” dollars, for example.**

**And what's \$1,000,000,000 in a health care system that melts that amount in a few hours.....How many zeros in a billion?**

**The next time you hear a politician use the Word 'billion' in a casual manner, think about Whether you want the 'politicians' spending our tax money.**

**A billion is a difficult number to comprehend, But one advertising agency did a good job of Putting that figure into some perspective in One of its releases.**

- A. A billion seconds ago it was 1959.
- B. A billion minutes ago Jesus was alive.
- C. A billion hours ago our ancestors were living in the Stone Age.
- D. A billion days ago no-one walked on the earth on two feet.
- E. A billion dollars ago was only 8 hours and 20 minutes, at the rate our government is spending it.



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So why not assume our role of responsibility and stand up to take action and develop a strategy to begin confronting this bloated healthzilla? After all:

"History does not entrust the care of freedom to the weak or timid."

-Dwight Eisenhower

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## **Could Physicians Take the Lead in Health Reform?**

Physicians have a key role in reforming US medical care. The fundamental problem with the health care system is its high, uncontrollable cost, and that cost is largely determined by the elective decisions of physicians to use medical resources.

Health policy experts increasingly suggest that controlling these physician-generated costs will require a change from fee-for-service to some type of global payment, and the formation of accountable care organizations (ACOs) in which integrated multispecialty groups of physicians will be able to share global payments with hospitals and other providers.

In March 2010, Congress passed the Patient Protection and Affordable Care Act, which greatly extended public and private insurance coverage but did not replace fee-for-service payment or change the organization of medical practice.

The act does provide support for trials of ACOs and for experiments with improving fee-for-service payments but most physicians are not organized or ready for ACOs, and Congress is unlikely to mandate the general use of global payments for government programs anytime soon.

However, without waiting for new legislation, physicians could begin a transition to a major change in medical practice needed to save the imperiled US health care system.

Before fee-for-service could be replaced nationally by some form of global payment and before ACOs could become a mainstream feature of US health care, there would have to be a reorganization of medical care delivery.

All physicians would need to become part of medical groups that included most or all specialties.

These groups could then receive global payments rather than fee-for-service reimbursement, and in collaboration with 1 or more hospitals could function as ACOs, capable of providing all services for a patient over a specified period or for a given episode of illness.

Nearly 25% of all practicing physicians in the United States may be practicing in multispecialty groups.

Many hospitals are now for-profit businesses, or are managed as if they were, and their economic imperatives might well conflict with the objectives of organized physicians in a reformed health care system.

If the number of salaried multispecialty physician-managed groups were to increase sufficiently, they would probably generate public support for more such groups.

Especially if these salaried groups were not-for-profit, they would be appealing because their professional values and their concern for the quality of care would outweigh commercial incentives.

Stabilizing and integrating the new group practices into a national system would require help from government, such as loans or grants to subsidize start-up costs, protection from antitrust action, and reinsurance against adverse selection.

Major reform of the hospital payment system might then become the logical next step taken by Congress, and this legislation would determine whether a national insurance plan would pay for hospital care directly or through the groups.

But if enough practicing physicians decided to join or to help organize not-for-profit salaried groups, they would have taken an important first step in getting reform started.

This would be a major contribution, because no major change in the organization of medical care can be successfully implemented by legislation alone.

*The voluntary action of physicians must be part of the solution.*

*Government action will ultimately be needed to consolidate, support, and regulate the profession's new role, but government cannot do the job without active participation by physicians.*

During the next few years, there will likely be legislative gridlock in Congress and probably little or no progress toward major reform will occur.

However, the medical profession could begin transforming the way medical care is delivered now.

No other sector of US society can do this. Only the medical profession has the potential to begin moving the United States toward the health care reforms so urgently needed.

**And now for an accurate organizational review of the extraneous and intrinsic features driving our current health care crisis, as espoused by none other than the brother of former Obama chief advisor Rahm Emanuel:**

## **The Perfect Storm of Overutilization**

*Ezekiel J. Emanuel, MD, PhD; Victor R. Fuchs, PhD*

**JAMA.** 2008;299(23):2789-2791.

*"A perfect storm" occurs when a confluence of many factors or events—no one of which alone is particularly devastating—creates a catastrophic force. Such confluence is rare and devastating. Over time and through disconnected events, US health care has evolved into a "perfect storm" that drives overutilization and increases the cost of health care.*

### **Higher Costs in the United States**

*The United States spends substantially more per person on health care than any other country, and yet US health outcomes are the same as or worse than those in other countries.<sup>1-2</sup> In 2005, the last year for which comparative statistics are available, the United States spent \$6401 per person, whereas the next highest spending was in Norway and Switzerland, \$4364 and \$4177, respectively (Table).<sup>3-4</sup> Overall, US health care expenditures are 2.4 times the average of those of all developed countries (\$2759 per person), yet health outcomes for US patients, whether measured by life expectancy, disease-specific mortality rates, or other variables, are unimpressive (Table).*

*There are many explanations for the higher costs of US health care. Because health insurance must be underwritten and sold to individual employers and self-insured individuals, administrative costs exceed \$145 billion. This does not include employers' costs for purchasing and managing employees' health insurance. One estimate suggests that the private employer insurance market wastes more than \$50 billion in administrative costs.<sup>5</sup>*

*A second factor is higher prices in the United States for important inputs to health care, such as physicians' services, prescription drugs, and diagnostic testing. US physicians earn double the income of their peers in other industrialized countries (Table). Similarly, prices to the public for drugs in the United States are 10% to 30% higher than in other developed countries.<sup>6</sup> Disparities in prices of inputs to health care account for at least \$100 billion annually of higher spending in the United States.<sup>5</sup>*

*A third contributor to US costs is the abundance of amenities. Hospital rooms in the United States offer more privacy, comfort, and auxiliary services than do hospital rooms in most other countries. US physicians' offices are typically more conveniently located and have parking nearby and more attractive waiting rooms.*

## **Overutilization of Health Care**

*The most important contributor to the high cost of US health care, however, is overutilization. Overutilization can take 2 forms: higher volumes, such as more office visits, hospitalizations, tests, procedures, and prescriptions than are appropriate or more costly specialists, tests, procedures, and prescriptions than are appropriate.*

*It is more costly care, rather than high volume, that accounts for higher expenditures in the United States. The volume of services is not extreme. A hospitalization rate of 121 per 1000 US patients is higher than that of Japan (106) but considerably lower than the rate in Switzerland (157), Norway (173), and France (268) and lower than the Organization for Economic Co-operation and Development (OECD) average (163) (Table).<sup>3-4</sup> The US hospitalization rate is 21st of 30 OECD countries. Similarly, US patients have 3.8 physician visits annually per capita, fewer than the OECD average of 6.8.<sup>3-4,6</sup>*

*In contrast with volume, in which the United States is not the leader, there are almost 3 times as many magnetic resonance imaging scanners in the United States as the OECD average, higher only in Japan.<sup>3-4</sup> US patients receive considerably more cardiac revascularization procedures (579 per 100 000 population)—coronary artery bypass grafts, angioplasties, and stents—45% more than patients in Norway, the country with the next highest number.*

*The United States has the fourth highest per capita consumption of pharmaceuticals.<sup>6</sup> US patients utilize many more "new drugs"—those on the market 5 years or fewer—than patients in other countries.<sup>6</sup> For instance, ezetimibe, which decreases low-density lipoprotein cholesterol level and was approved in October 2002, is not recommended by major guidelines as first-line therapy. Nevertheless, the use of ezetimibe in the United States is about 5 times higher than it is in Canada, constituting more than 15% of prescriptions for lipid-lowering agents. Greater use of new, more expensive pharmaceuticals, as well as higher prices both for older and newer drugs, helps explain why the United States spent \$752 per capita (2005) on drugs, whereas France, with the next highest expenditure, spent \$559 and Japan just \$425.*

## **The Ingredients of the Perfect Health Care Storm**

*At least 7 factors drive overuse, 4 related to physicians and 3 related to patients.*

- 1. First, there is the matter of physician culture. Medical school education and postgraduate training emphasize thoroughness. When evaluating a patient, students, interns, and residents are trained to identify and praised for and graded on enumerating all possible diagnoses and tests that would confirm or exclude them. The thought is that the more thorough the evaluation, the more intelligent the student or house officer. Trainees who ignore the improbable "zebra" diagnoses are not deemed insightful. In medical training, meticulousness, not effectiveness, is rewarded. This mentality carries over into practice. Peer recognition goes to the most thorough and aggressive physicians. The prudent physician is not deemed particularly competent, but rather inadequate. This culture is further reinforced by a unique understanding of professional obligations, specifically, the **Hippocratic Oath's admonition to "use my power to help the sick to the best of my ability and judgment"** as an imperative to do everything for the patient regardless of cost or effect on others.*
- 2. Second, fee-for-service payment misaligns incentives; it creates a big incentive for overutilization. Although most physicians are not income maximizers, they know that it is better to be paid to do something and the higher the payment the better. Paying for doing more adds a strong financial motivation to what is often a slim clinical rationale for an intervention.*
- 3. Furthermore, the current system's bias toward paying significantly more for procedures rather than for evaluation and management reduces physicians' inclination to watch, wait, and communicate and increases their propensity to order a test. This financial incentive for physicians to order and perform more expensive procedures is compounded by marketing. Physicians face a paradoxical situation. They are flooded with information; each month there are hundreds of*

*publications on cancer alone. Simultaneously, there is a paucity of data comparing different treatments and interventions. It is time consuming and difficult for physicians to judiciously incorporate new data into their practices. This creates a powerful role for physician-directed pharmaceutical marketing, which expends more than \$7 billion annually—about \$10 000 per physician. Companies can selectively highlight favorable studies from the mass of research, confident that there are few comparative effectiveness data for physicians to put the marketers' desired conclusions into a proper context.*

- 4. Medical malpractice laws and the resultant defensive medicine also contribute to overutilization. There is controversy about whether malpractice litigation and concomitant real cost of premiums are increasing or decreasing. There is no doubt, however, about the increase in physicians' concern about malpractice suits and their inclination to do more.*
- 5. Then there is the patient side. US patients prefer high technology over high touch. As the energy crisis highlights, Americans tend to embrace technologic fixes for problems. US culture emphasizes the new and the fancy; old and plain is equated with deprivation. In the medical sphere, this cultural value informs a patient perception that doing more tests and receiving more treatments and interventions is receiving better care. This helps to explain inappropriate prescribing of antibiotics for viral infections.*
- 6. A sixth contributor is direct-to-consumer marketing. Pharmaceutical companies spend more than an estimated \$4 billion annually advertising prescription drugs, with the concluding advice of "talk to your doctor about. . . ." These ads drive patients' requests for new and more costly medications.*
- 7. In normal markets, demand is modulated by cost. But third-party payment for patients attenuates this control. Although patients experience deductibles, co-payments, and other out-of-pocket expenses, health insurance and government programs significantly shield patients' decisions from the true costs of health care.*

*Alone, each of these factors would induce some overutilization. When they coincide, however, they amplify and reinforce each other to create a perfect storm of "more": more referrals to specialists, expensive tests, procedures, and treatments. For instance, patients' desires for "peace of mind," physicians' training to be thorough, and worries about malpractice suits coalesce to induce more testing and treatments. When physicians make money on interventions and patients pay little for them, cost becomes largely irrelevant. The relative cost-unconscious environment augments the incentive for drug, device, and other manufacturers to develop more new expensive tests and treatments, even when they provide small marginal benefits to patients.*

### **Policy Implications of the Perfect Storm**

*Some elements in the perfect storm are difficult or impossible to change; some, arguably, should not change. Changing Americans' affinity for new technology is somewhere between difficult, impossible, and undesirable.*

*Calls for changing physician training and culture are perennial and usually ignored. However, the progression in end-of-life care mentality from "do everything" to more palliative care shows that change in physician norms and practices is possible. The escalation in health care costs poses a great challenge to the leaders of US medicine to recognize the gravity of the situation and to move toward more socially sustainable, cost-effective care. Rapid reforms of medical education and training, even when widely acknowledged as essential, are uncommon.*

*Another potential policy change is to curb aggressive marketing to physicians and consumers. After recent problems with new, heavily promoted pharmaceuticals, there is increasing pressure to reduce or*

eliminate direct-to-consumer advertising. Simultaneously, there are credible calls for restricting the access of "pharmaceutical" representatives to physicians. Although laudable, such changes alone are unlikely to have a large effect on overutilization. Similarly, changes in malpractice law could help: Some experts estimate defensive medicine adds 5% to 9% to health care expenditures,<sup>11</sup> but reform would affect only some defensive practices.

Realistically, the most effective policy change would be to alter how insurance pays for medical services. One step is for more value-based co-payments, modeled on current tiered pharmaceutical benefits, that link the amount patients pay to effectiveness and cost of alternatives.<sup>12</sup> For instance, men with early stage prostate cancer who choose radiation therapy might have no co-payment for 3-dimensional conformal radiation but might have to cover the marginal cost if they want more expensive intensity-modulated radiation therapy. Value-based co-payments would promote high-value interventions and discourage use of marginal medicine. It would help if patients were financially sensitive to the cost of care, but not if out-of-pocket costs inhibit use of needed services, resulting in higher costs later. This is not an all-or-nothing rationing scheme, but rather an ethical way to have patients experience costs but not at the expense of important outcomes.<sup>12</sup>

Finally, private and public payers for health care must work on developing better financial incentives for physicians and hospitals to provide more cost-effective care. Many more experiments are needed with pay for performance, bundled payments, partial capitation, value-based payment, or other payment methods that promote prudent use of resources. Such experiments with different ways of paying for health care services must be combined with careful monitoring of utilization, cost, and quality.

## **Conclusion**

The United States has created the perfect storm for overutilization of health care. Costs cannot be controlled unless overutilization is substantially reduced. Many physician and patient factors—ingrained values, physician culture, advertising, payment—drive and synergistically intensify overutilization. The best hope for reining in costs is to devise financial incentives for physicians and patients that result in greater health care value.

**And then we must move painfully from the hypothetical, but beautifully accurate hypothesis by Zeke Emanuel to the grim and inescapable realities of our existing health care system:**

## **Imaging Self-Referral Associated With Higher Costs and Limited Impact on Duration of Illness**

Physicians' practice of self-referring patients for imaging tests with the doctors' own scanners does not reduce the duration of illness or lower costs, according to researchers. From a study of 733,459 episodes of care involving 470,530 unique patients at least 65 years old, the researchers determined that the practice actually supports more testing and greater radiation exposure. The researchers made 20 analyses, and 13 showed substantially higher costs with self-referral while just one "showed a significantly lower cost." When the doctor self-refers a patient, the cost per treatment episode generally averages 4 percent to 10 percent higher. The researchers also learned that the cost of the imaging test itself was on average 27 percent to 40 percent higher when the test was self-referred, and non-imaging costs were not reduced. They concluded, "Medicare's current exemption for self-referred imaging should be narrowed so that it includes only x-rays, not other forms of imaging. To the extent that state laws or private payers permit self-referral for imaging, they would also do well to follow this policy."

From "Imaging Self-Referral Associated With Higher Costs and Limited Impact on Duration of Illness" *Health Affairs* (Fall 2010) Vol. 29, No. 12, P. 2244 Hughes, Danny R.; Bhargavan, Mythreyi; Sunshine, Jonathan H.; et al.

It only gets “better”:

## **OTHERS SAY: Doctors and self-dealing**

### **WASHINGTON POST**

Tuesday, February 15, 2011

LITTLE ROCK — Doctors are not permitted to sell the medicine they prescribe, and for an excellent reason: It would be a conflict of interest, creating financial incentive for physicians to peddle drugs of little or no benefit to patients.

So why should doctors be allowed to both order and administer MRIs, CT scans and other high-tech procedures that may or may not be needed and useful?

The answer is, they shouldn't. But doctors are engaging in so-called self referrals in dramatically greater numbers and reaping the financial rewards. They may be adding billions to medical costs in added insurance premiums and taxes.

There is substantial evidence that doctors who own scanners order excessive scans. In 2009 the Post's Shankar Vedantam recounted the case of Urological Associates, a medical practice on the Iowa-Illinois border treating kidney stones and other ailments for which scans are common diagnostic tools. In the months after the urologists purchased their own CT scanner, the number of scans they ordered soared by more than 700 percent. Academic and government studies suggest similar behavior across the country.

Orthopedists and other doctors, while acknowledging that some colleagues may profit from dubious or unneeded tests, argue that it's unfair to paint all physicians with the same brush. They say that it would be enormously inconvenient to patients, and inefficient for the medical system, to forbid doctors from performing such procedures in-house. And they point out that radiologists, who may recommend follow-up testing, are not immune from the profit motive.

But the simple fact is that self-referrals create a brazen temptation for abuse.

**And more:**

## **New Focus of Inquiry into Bribes: Doctors**

**By BARNABY J. FEDER**

A long-running federal investigation into the orthopedic device industry's suspected kickback payments to hip and knee surgeons now has the doctors in the spotlight.

Having reached settlements with the five leading makers of artificial joints last year over the payments, the government has been focusing on the many doctors who receive money as the companies' paid consultants.

“We are going to be looking at those soliciting kickbacks,” Lewis Morris, the chief counsel in the federal office that pursues civil complaints of Medicare fraud, told an audience of hundreds of doctors, company representatives and investors this month in San Francisco at the annual meeting of the American Academy of Orthopedic Surgeons.

The same message has gone out to health care lawyers attending legal education seminars in recent months and, directly from Christopher J. Christie Jr., the United States attorney in Newark, who is overseeing the investigation. Executives say Mr. Christie has addressed sales meetings of the five companies, which reached a settlement last fall to avoid prosecution on charges they had routinely paid illegal kickbacks to surgeons.

**Author unknown:**

**"I think Congressmen should wear uniforms like NASCAR drivers so we could identify their corporate sponsors."**

**So let's have an example of the legislative response:**

### ***Healthcare Bill Requires Doctors to Disclose Stake in Imaging Equipment***

*For years; doctors with patients who needed an MRI or another medical imaging procedure had to send their patients to outside imaging centers. However, a growing number of doctors are bringing medical imaging machines into their own practices, which doctors say enable them to work more closely with medical imaging technicians and provide their patients with immediate results. However, critics say these self-referrals result in excess tests and higher Medicare spending, and should be banned. So far, Congress has largely avoided the debate.*

*Under the healthcare overhaul, doctors who refer Medicare and Medicaid patients to in-house imaging machines must disclose in writing that they own the equipment. They will also have to tell patients that they can get the services elsewhere and provide them with a list of 10 alternative sites within 25 miles. These rules go into effect in 2011.*

*Since the early 1990s, federal law has largely prevented doctors from referring patients for certain services, including imaging and lab tests, to entities in which they have a financial interest. However, that law exempts doctors who provide such services in their offices, because regulators thought it would be more convenient for patients if doctors could use in-house X-rays to make a diagnosis. In recent years, cardiologists, orthopedic surgeons, urologists and other specialists have used that exemption to buy increasingly high-tech and expensive imaging equipment for office use.*

**And on and on:**

### ***Association for Medical Ethics***

#### ***A Medtronic spine-fusion device***

*By JOHN CARREYROU and TOM MCGINTY*

*Norton Hospital in Louisville, Ky., may not be a household name nationally. But five senior spine surgeons have helped put it on the map in at least one category: From 2004 to 2008, Norton performed the third-most spinal fusions on Medicare patients in the country.*

*The five surgeons are also among the largest recipients nationwide of payments from medical-device giant Medtronic Inc. In the first nine months of this year alone, the surgeons—Steven Glassman, Mitchell Campbell, John Johnson, John Dimar and Rolando Puno—received more than \$7 million from the Fridley, Minn., company.*

*Medtronic and the surgeons say the payments are mostly royalties they earned for helping the company design one of its best-selling spine products.*

*Corporate whistleblowers and congressional critics contend such arrangements—which are common in orthopedic surgery—amount to kickbacks to stoke sales of medical devices. They argue that the overuse of surgical hardware ranging from heart stents to artificial hips is a big factor behind the soaring costs of Medicare, the government medical-insurance system for the elderly and disabled.*

*Medtronic says it can't develop new medical products that improve patients' lives without the help of surgeons. It says the royalties it pays them are legitimate but it doesn't give detailed information about what intellectual property each recipient contributes.*

**Pertaining to the following “revelation” about statin medications, coupled with the fact that our patients place their trust in us, Dr. Chris Centeno opined:**

“We allopathic doctors told patients that statin medications would reduce hearts attacks from 6 per 100 to 3 per 100 over 5 years (a measly 3% reduction in absolute risk for taking a medication 1,500 times) might have a 50% chance of side effects that could include being confused and we’re scratching their heads about why patients didn’t want to take the drugs. Only in American medicine could this happen. I’m embarrassed for my profession on this one...”

## **Adverse Effects Weigh Heavily in Patients' Drug Decisions**

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*Adverse effects hold greater sway than the magnitude of potential benefits on older patients' willingness to take drugs for primary prevention of cardiovascular disease, researchers found.*

*When presented with a hypothetical drug akin to statins and many antihypertensives for clinical risk reduction, 88% of older adults surveyed said they would be willing to take it if it had no adverse effects, Terri R. Fried, MD, of Yale, and colleagues reported online in the Archives of Internal Medicine.*

*Dropping the benefit from six to three fewer heart attacks per 100 people taking the drug over five years had little effect on the percentage willing to take it (82%) as long as there were no adverse effects.*

### **Action Points**

§ *Point out that older persons' willingness to take medication for primary cardiovascular disease prevention is relatively insensitive to its hypothetical benefit but is highly sensitive to its adverse effects.*

§ *Note that these data suggest that more detailed discussion of potential and likelihood of adverse event risks is indicated.*

*However, introducing the risk of mild side effects -- fatigue, nausea, or fuzzy thinking -- made 48% to 69% unwilling or uncertain about taking the drug.*

*The prospect of adverse effects severe enough to have an impact on activities of daily living scared off all but 3% of the surveyed older adults.*

*These preferences may be having a direct impact on clinical practice, Fried explained in an interview with MedPage Today.*

*Relatively minor side effects that physicians and guidelines tend to discount in recommending treatment may not get the same pass from patients, she noted.*

*"Practically speaking, nonadherence to medications is very high," she said. "We think a part of it may be that patients are making decisions all the time based on what they're experiencing."*

*Fried recommended involving patients in the decision about what benefits are worth potential harm, with more detailed discussion of adverse event risks as well as follow-up.*

*"Where the focus needs to be is physicians reviewing with patients whether they think they are experiencing any adverse effects of medications, a question that is not always routinely asked," she argued, "then systematically thinking about which medications might be causing those effects, and then potentially modifying people's treatment regimen to have trials off of medication."*

*An approach that gives more weight to adverse effects in prescribing decisions could give physicians pause in adding new medications to the mix for an older adult, commented Howard Guzik, MD, chief of geriatric medicine at North Shore University Hospital in Manhasset, N.Y.*

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*"This is a particularly relevant finding because the tendency among physicians is often to prescribe medication in clinical settings where the benefits of this pharmacologic intervention is often tenuous or unclear," he said in a statement e-mailed to reporters.*

*Older adults may not differ from younger patients in their preferences, but they are more likely to experience adverse effects because of their typically more extensive medication regimens, Fried noted.*

*Her group looked at risk-benefit decisions among 356 people, mean age 76, at three senior centers and one assisted-living facility. At in-person interviews, the researchers presented different hypothetical scenarios of taking a once-daily drug covered by insurance to prevent a first heart attack.*

*They found that willingness to take the drug for primary prevention drug had relatively little to do with the benefit it would confer.*

*For example 83% who were initially uncertain or unwilling to take a drug with a 30% relative risk reduction for myocardial infarction continued to be unwilling or uncertain if the risk reduction rose to 50%.*

*Notably, the top two reasons given for not wanting to take the medication were belief that the benefit was too small and belief that the medication would have adverse effects despite what the scenario indicated.*

*White race, higher self-rated health, and fewer chronic conditions were associated with willingness to take the medication in the baseline scenario, but age, sex, income, education, marital status, health literacy, depression, functional status, number of prescription medications, and quality of life were not.*

*Another important limitation was that the benefit of the hypothetical medication was presented in terms of disease risk reduction rather than in terms of its impact on overall functional, symptom, and survival outcomes. The researchers reported having no conflicts of interest to disclose.*

**Primary source:** Archives of Internal Medicine

Source reference:

Fried TR, et al "Effects of benefits and harms on older persons' willingness to take medication for primary cardiovascular prevention" Arch Intern Med 2011; DOI: 10.1001/archinternmed.2011.32.

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**What is being proposed by others in the fray?**

**Jackson Healthcare is proposing a new federal law in March 2011 to address the high cost of defensive medicine:**

*This is not a traditional tort reform approach that seeks to limit or "cap" physician liability.*

*It proposes a no-fault system that benefits physicians in three important ways:*

- 1.) Prevents anyone from suing physicians personally for medical malpractice.*
- 2.) Eliminates the hassles of physicians defending themselves against lawsuits.*
- 3.) Protects physicians from being personally financially liable and indefinitely tied up in court.*

*In essence, this proposal would be similar to the workers' compensation system. It would:*

- 1.) Create a separate administrative agency to oversee malpractice claims,*
- 2.) Move medical malpractice cases out of civil court system;*

3.) *Ensure contested cases are reviewed by a physician panel, rather than a public jury*

**I know that most men can seldom accept even the most obvious truth if it would oblige them to admit the falsity of conclusions which they proudly taught to others, and which they have woven, thread by thread, into the fabric of their lives."**

**Leo Tolstoy**

**Out of the mouth of Harvard Business School:**

**Harvard professor claims technology can fix the healthcare system:**

## ***Will disruptive innovations cure health care?***

*Harvard Business School, Boston, USA.*

*It's no secret that health care delivery is convoluted, expensive, and often deeply dissatisfying to consumers. But what is less obvious is that a way out of this crisis exists. Simpler alternatives to expensive care are already here--everything from \$5 eyeglasses that people can use to correct their own vision to angioplasty instead of open-heart surgery. Just as the PC replaced the mainframe and the telephone replaced the telegraph operator, disruptive innovations are changing the landscape of health care. Nurse practitioners, general practitioners, and even patients can do things in less-expensive, decentralized settings that could once be performed only by expensive specialists in centralized, inconvenient locations. But established institutions--teaching hospitals, medical schools, insurance companies, and managed care facilities--are fighting these innovations tooth and nail. Instead of embracing change, they're turning the thumbscrews on their old processes--laying off workers, delaying payments, merging, and adding layers of overhead workers. Not only is this at the root of consumer dissatisfaction with the present system, it sows the seeds of its own destruction. The history of disruptive innovations tells us that incumbent institutions will be replaced with ones whose business models are appropriate to the new technologies and markets. Instead of working to preserve the existing systems, regulators, physicians, and pharmaceutical companies need to ask how they can enable more disruptive innovations to emerge. If the natural process of disruption is allowed to proceed, the result will be higher quality, lower cost, more convenient health care for everyone.*

*"Healthcare stakeholders should welcome disruption as an opportunity to advance the industry," and "technology is the disruptive innovation that can help fix the broken healthcare system," said Clayton Christensen, author and Harvard Business School Professor, Friday at the America's Health Insurance Plans conference. He claimed healthcare technology could "make healthcare affordable for those who cannot pay for healthcare services." Christensen pointed to "three specific technologies" to implement his ideas: "molecular diagnostics to understand genetic structure, imaging technologies to look inside the body, and high-bandwidth telecommunications to bring expertise to offices with limited healthcare resources." If his "views are borne out, integrated caregivers, such as Kaiser Permanente,...will have a significant advantage over other stakeholders."*

**And so it follows that:**

## ***Universities will be 'irrelevant' by 2020***

*PROVO — Last fall, David Wiley stood in front of a room full of professors and university administrators and delivered a prediction that made them squirm: "Your institutions will be irrelevant by 2020."*

*Wiley is one part Nostradamus and nine parts revolutionary, an educational evangelist who preaches about a world where students listen to lectures on iPods, and those lectures are also available online to*

everyone anywhere for free. Course materials are shared between universities, science labs are virtual, and digital textbooks are free.

Institutions that don't adapt, he says, risk losing students to institutions that do. The warning applies to community colleges and ivy-covered universities, says Wiley, who is a professor of psychology and instructional technology at Brigham Young University.

America's colleges and universities, says Wiley, have been acting as if what they offer — access to educational materials, a venue for socializing, the awarding of a credential — can't be obtained anywhere else. By and large, campus-based universities haven't been innovative, he says, because they've been a monopoly.

But Google, Facebook, free online access to university lectures, after-hours institutions such as the University of Phoenix, and virtual institutions such as Western Governors University have changed that. Many of today's students, he says, aren't satisfied with the old model that expects them to go to a lecture hall at a prescribed time and sit still while a professor talks for an hour.

### **The American Pain Society (APS) weighs in with the obvious concept of Interdisciplinary Medicine (we also refer to as Integrative Medicine):**

*Dr. Chou said patients with chronic low-back pain should undergo interdisciplinary rehabilitation before clinicians try more invasive treatments, according to new guidelines from the American Pain Society (APS).*

*In addition, doctors should fully inform patients of the potential risks and benefits of invasive therapies, such as surgery, as part of a shared decision-making process, according to Roger Chou, M.D., of Oregon Health & Science University in Portland, director of the APS clinical practice guideline program.*

*In addition, he said, many invasive treatments are not backed by very strong evidence.*

*Dr. Chou and colleagues made eight recommendations:*

- 1. Provocative discography is not recommended for diagnosis in patients with chronic, nonradicular low-back pain.*
- 2. Intensive interdisciplinary rehabilitation, which incorporates psychological interventions and exercise therapy, with cognitive/behavioral emphasis should be considered for patients with nonradicular low-back pain who do not respond to conventional, noninterdisciplinary therapies.*
- 3. Facet joint corticosteroid injection and intradiscal corticosteroid injections should not be used for patients with persistent nonradicular low-back pain.*
- 4. The risks and benefits of surgery should be discussed, and shared decision-making that includes a discussion of interdisciplinary rehabilitation as an option should be used for patients with nonradicular low-back pain, common degenerative spinal changes, and persistent and disabling symptoms.*
- 5. There is not enough evidence to guide the use of vertebral disc replacement in patients with nonradicular low back pain, common degenerative spinal changes, and persistent and disabling symptoms.*
- 6. The risks and benefits of epidural steroid injections should be discussed, and shared decision-making that includes a specific review of evidence of lack of long-term benefit should be used for patients with persistent radiculopathy due to herniated lumbar disc. Evidence for epidural steroid*

*injection in spinal stenosis cases is sparse and shows no clear benefit, although more trials are needed.*

- 7. The risks and benefits of surgery should be discussed, and shared decision-making that includes a specific discussion about moderate benefits that decrease over time should be used for patients with persistent and disabling radiculopathy due to herniated lumbar disc or persistent and disabling leg pain due to spinal stenosis.*
- 8. The risks and benefits of spinal cord stimulation should be discussed, and shared decision making that includes a reference to the high rate of complications following stimulator placement should be used for patients with persistent and disabling radicular pain following surgery for herniated disc and no evidence of a persistently compressed nerve root.*

*In issuing guidelines that see invasive procedures as a last step, the researchers noted that more than **half the patients who undergo surgery do not experience an "excellent" or "good" outcome** (defined as no more than sporadic pain, slight restriction of function, and occasional analgesics).*

*And, though operative deaths are uncommon, **early complications occur in up to 18% of patients who undergo fusion surgery in randomized trials, they said.***

*The group developed the recommendations after a systematic review of the literature, which turned up 3,348 abstracts and 161 clinical trials evaluating both invasive and noninvasive treatments for low-back pain.*

*The latest update focuses on patients who have not responded to initial therapies, and follows 2007 guidelines for initial evaluation and management of low-back pain in primary care.*

### **Arthritis Prevention and Chiropractic**

#### **Chiropractic prevents arthritis in accident victims, the elderly and the sedentary**

**By Mark Studin DC, FASBE(C), DAAPM, DAAMLPL**

*According to the Arthritis Foundation (2007), "Forty-six million [46,000,000] Americans are currently living with arthritis, the nation's leading cause of disability, and we are all paying a high price for it. The Centers for Disease Control and Prevention (CDC) announced that the annual cost of arthritis to the United States economy was \$128 billion in 2003 and increased by \$20 billion between 1997 and 2003.*

*CDC attributes the dramatic increase to the aging of the population, predominantly baby boomers, and increased prevalence of arthritis. CDC also estimates an additional 8 million new cases of arthritis will be diagnosed in the next decade" (<http://www.arthritis.org/cost-arthritis.php>).*

*Arthritis, A.D.A.M., Inc. (2010, February 5), "...is inflammation of one or more joints, which results in pain, swelling, stiffness, and limited movement. There are over 100 different types of arthritis... Causes, incidence, and risk factors*

*Arthritis involves the breakdown of cartilage. Cartilage normally protects the joint, allowing for smooth movement. Cartilage also absorbs shock when pressure is placed on the joint, like when you walk. Without the usual amount of cartilage, the bones rub together, causing pain, swelling (inflammation), and stiffness.*

*You may have joint inflammation for a variety of reasons, including:*

*- An autoimmune disease (the body attacks itself because the body immune system believes a body part*

*is foreign)*

- Broken bone
- General wear and tear
- Infection (usually cause by bacteria or viruses)...

*With some injuries and diseases, the inflammation does not go away or destruction results in long-term pain and deformity. When this happens, you have chronic arthritis. Osteoarthritis is the most common type and is more likely to occur as you age. You may feel it in any of your joints, but most commonly in your hips, knees or fingers. Risk factors for osteoarthritis include:*

- Being overweight
- Previously injuring the affected joint
- Using the affected joint in a repetitive action that puts stress on the joint (baseball players, ballet dancers and construction workers are all at risk)

*Arthritis can occur in men and women of all ages. About 37 million people in America have arthritis of some kind, which is almost 1 out of every 7 people" (<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002223>). With hypomobility (less mobility or movement), adhesions occur in a joint (the region where 2 bones connect).*

*According to A.D.A.M., Inc. (2010, March 30), "Adhesions are bands of scar-like tissue that form between two surfaces inside the body and cause them to stick together. As the body moves, tissues or organs inside are normally able to shift around each other. This is because these tissues have slippery surfaces.*

### ***Causes, incidence, and risk factors***

*Inflammation (swelling), surgery, or injury can cause adhesions to form almost anywhere in the body...Once they form, adhesions can become larger or tighter over time. Symptoms or other problems may occur if the adhesions cause an organ or body part to twist, pull out of position, or be unable to move as well.*

*Adhesions may form around joints such as the shoulder...or ankles, or in ligaments and tendons. This problem may happen:*

- After surgery or trauma
- With certain types of arthritis
- With overuse of a joint or tendon

*Symptoms*

*Adhesions in joints, tendons, or ligaments make it harder to move the joint and may cause pain...Adhesions in the pelvis may cause chronic or long-term pelvic pain.*

*Signs and tests*

*Most of the time, the adhesions cannot be seen using x-rays or imaging tests" (<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002462>).*

*Over time, with a sedentary lifestyle as seen in many portions of the population and increasingly with the elderly, joints become hypomobile. Hypomobility is also seen in trauma-related cases and repetitive use injuries, such as reading while looking down for extended periods, carrying heavy items, holding the*

*phone between one's shoulder and ear, prolonged use of hands, wrists, back and neck, excessive use of computers, etc. As time progresses, internal scar tissue or adhesions continue to develop and further increases the loss of mobility.*

*According to Cramer, Henderson, Little, Daley and Grieve in 2010, previous studies have shown that this hypomobility causes degeneration of the joints that connect the bones, which results in arthritis. As time goes on, both the adhesions (internal scar tissue) and arthritis increase. Therefore, with the persistent sedentary lifestyle and no chiropractic care for the hypomobility, the arthritis will get worse over time.*

*Cramer et al. (2010) also reported that according to their laboratory studies, chiropractic adjustments increase the "Z gap" or spacing between the joints/bones and increase mobility of the joints. As a result, the adjustments prevent further development of adhesions, degeneration and osteophytes, which is the arthritic process. In short, chiropractic adjustments prevent arthritis.*

*Regardless of the timing of the beginning of chiropractic care, it conclusively increases mobility and prevents loss of mobility, preventing the development of internal scar tissue (adhesions) and, therefore, arthritis.*

*This breakthrough research that affects approximately 1 in 7 Americans is also draining our economy with its \$128 billion price tag. While not all arthritis is a result of hypomobility, much of it is. If every person was under chiropractic care, we could not only positively affect the lives of every American, we could potentially rescue the economy of the United States and every other country and insurer in the world that assumes risk for an aging and hypomobile society.*

**So what can we mere humans do to try to address these problems and effect change?**

## **Can You Become a Creature of New Habits?**

**By JANET RAE-DUPREE**

*HABITS are a funny thing. We reach for them mindlessly, setting our brains on auto-pilot and relaxing into the unconscious comfort of familiar routine. "Not choice, but habit rules the unreflecting herd," William Wordsworth said in the 19th century. In the ever-changing 21st century, even the word "habit" carries a negative connotation.*

*So it seems antithetical to talk about habits in the same context as creativity and innovation. But brain researchers have discovered that when we consciously develop new habits, we create parallel synaptic paths, and even entirely new brain cells, that can jump our trains of thought onto new, innovative tracks.*

*Rather than dismissing ourselves as unchangeable creatures of habit, we can instead direct our own change by consciously developing new habits. In fact, the more new things we try — the more we step outside our comfort zone — the more inherently creative we become, both in the workplace and in our personal lives.*

*But don't bother trying to kill off old habits; once those ruts of procedure are worn into the hippocampus, they're there to stay. Instead, the new habits we deliberately ingrain into ourselves create parallel pathways that can bypass those old roads.*

**We often cite wise proverbs from famous physicians, investors and Nobel laureates. While modern day philosopher Yogi Berra qualifies as none of the above, the recent period of historic**

economic, financial and health care decline reminds us of his notable observations. One is “The future ain’t what it used to be” and “It’s tough to make predictions, especially about the future.”

“The best way to predict the future is to invent it.” - Alan Kay.

So: What's the Next Big Thing? Who knows; life really boils down to 2 questions...

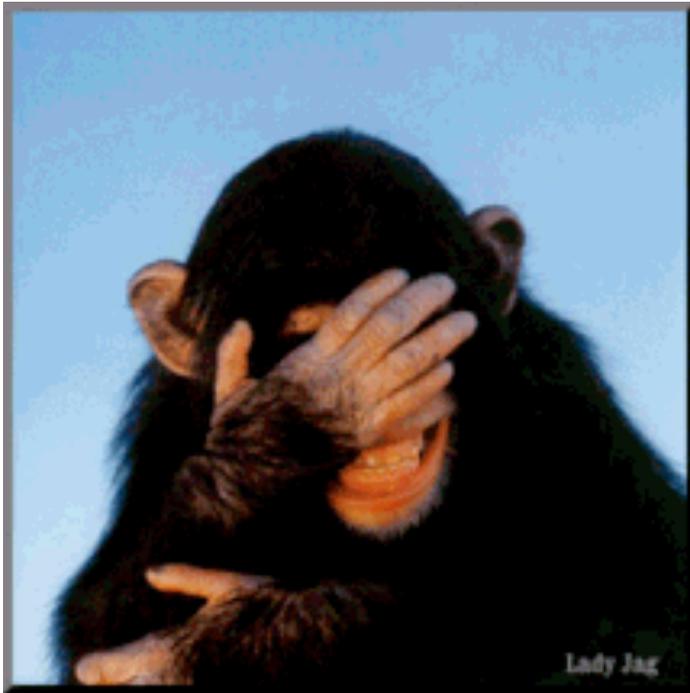
1. Should I get a dog.....?



OR...

2. Should I have children?





No matter what situations life throws at you...

No matter how long and treacherous your journey may seem.

Remember there is a light at the end of the tunnel.



A handwritten signature in black ink, which appears to read "D.L. Harshfield, Jr.".

D.L. Harshfield, Jr. M.D., M.S.  
March 2011